APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,267	02/02/2001	James J. Fallon	8011-15	9730

7590 02/10/2004	**EXAMINER**
Frank Chau, Esq.	SURYAWANSHI, SURESH
F. CHAU & ASSOCIATES, LLP	

ART UNIT	PAPER NUMBER
2115	5

Frank Chau, Esq.
F. CHAU & ASSOCIATES, LLP
Suite 501
1900 Hempstead Turnpike
East Meadow, NY 11554

DATE MAILED: 02/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _02 February 2001_.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-16_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-16_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _02 February 2001_ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _4_.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-16 are presented for examination.

Drawings

2.   This application, filed under former 37 CFR 1.60, lacks formal drawings. The informal

drawings filed in this application are acceptable for examination purposes. When the application

is allowed, applicant will be required to submit new formal drawings. In unusual circumstances,

the formal drawings from the abandoned parent application may be transferred by the grant of a

petition under 37 CFR 1.182.

Specification

3.   The abstract of the disclosure is objected to because it contains more than 150 words.

Correction is required. See MPEP § 608.01(b).

4.   The disclosure is objected to because of the following informalities: U.S. Patent

Application Serial No. 09/266,394 is now Patent 6,601,103 at page 10, line 4.

        Appropriate correction is required.

5.   The disclosure is objected to because of the following informalities: U.S. Patent

Application Serial No. 09/481,243 is now Patent 6,604,158 at page 10, line 6.

Appropriate correction is required.

6.   The disclosure is objected to because of the following informalities: "greater that" should

be "greater than" at page 10, line 10.

      Appropriate correction is required.

7.   The disclosure is objected to because of the following informalities: U.S. Patent

Application Serial No. 09/210,491 is now Patent 6,195,024; page 11, line 7; page 50, line 3, 12,

and 15.

      Appropriate correction is required.

8.   The disclosure is objected to because of the following informalities: symbol "5" is not in

any figure; page 15, line1.

      Appropriate correction is required.

9.   The disclosure is objected to because of the following informalities: blank space should

be filled with Serial No. "09/775,897 at page 18, line 14.

      Appropriate correction is required.

10.   The disclosure is objected to because of the following informalities: symbol "30" at page

22, line 9 should be "35".

      Appropriate correction is required.

11.   The disclosure is objected to because of the following informalities: symbol "DSRA" is

used without any definition in spec; page 37, line 18; page 38, line 7.

        Appropriate correction is required.

12.   The disclosure is objected to because of the following informalities: word "data" should

be inserted after "the" and before "was" at page 41, line 16.

        Appropriate correction is required.

Claim Rejections - 35 USC § 102

13.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14.   Claims 1 are rejected under 35 U.S.C. 102(e) as being anticipated by Krocker et al (US

Patent no 6,073,232).

15.   As per claim 1, Krocker et al teach

maintaining a list of boot data used for booting a computer system [col. 2, lines 30-47;

col. 5, lines 1-7; a prefetch table containing a listing of the disk locations and length of data

records that were requested by the host computer in the immediately previous power-on/reset];

preloading the boot data upon initialization of the computer system [col. 2, lines 36-41;

col. 3, lines 30-39; col. 5, lines 17-21; data is preloaded into the cache according to the prefetch

table]; and

servicing requests for boot data from the computer system using the preloaded boot data

[col. 2, lines 41-47; col. 3, lines 30-39; data is communicated from the cache to the host

computer].

16.   As per claim 2, Krocker et al teach that the boot data comprises program code associated

with one of an operating system of the computer system, an application program, and a

combination thereof [col. 5, lines 41-51; requesting data records are part of a computer program

such as DOS or Windows].

17.   As per claim 3, Krocker et al teach that the step of preloading the boot data comprises

retrieving boot data from a boot device and storing the retrieved data in a cache memory [col. 3,

lines 30-39].

18.   As per claim 4, Krocker et al teach that the method steps are performed by a data storage

controller connected to the boot device [fig. 1; controller].

19.   As per claim 5, Krocker et al teach the step of updating the list of boot data during the

boot process [col. 8, lines 63-65; the prefetch table is updated].

20.   As per claim 6, Krocker et al teach the step of updating comprises adding to the list any

boot data requested by the computer system not previously stored in the list [col. 8, lines 63-68;

the prefetch table is updated].

21.   As per claim 7, Krocker et al teach that the step of updating comprises removing from the

list any boot data previously stored in the list and not requested by the computer system [col. 8;

lines 63-65; updating the prefetch table].

22.   As per claims 9 and 12, Krocker et al teach that the method steps are program

instructions that are tangibly embodied on a program storage device and readable by a machine

to execute the method steps [col. 9, lines 27-30; computer program].

23.   As per claim 10, Krocker et al teach

maintaining a list of application data associated with an application program [col. 11;

lines 30-34; a prefetch table containing disk storage location and length of the data records

requested by the application program];

preloading the application data upon launching the application program [col. 11, lines 46-

50; preloading the data cache prior to receiving a read command from the application]; and

servicing requests for application data from a computer system using the preloaded

application data [col. 11, lines 51-57; communicating the prestored data records of the

application from the data cache to the host computer].

24.   As per claim 13, Krocker et al teach

a digital signal processor (DSP) [fig. 1; host computer];

a programmable logic device [fig. 1, disk], wherein the programmable logic device is

programmed by the digital signal processor [fig. 1; host computer] to (i) instantiate a first

interface for operatively interfacing the boot device controller to a boot device [fig. 1; controller]

and to (ii) instantiate a second interface for operatively interfacing the boot device controller to

the host system [inherent to the system as a bus interface is used to interface the controller with

host computer]; and

a non-volatile memory device [fig. 1; disk;], for storing logic code associated with the

DSP, the first interface and the second interface, wherein the logic code comprises instructions

executable by the DSP for maintaining a list of boot data used for booting the host system [col. 5,

lines 1-7; a prefetch table is read from a reserved area of the disks], preloading the boot data

upon initialization of the host system [col. 2, lines 36-41; col. 3, lines 30-39; col. 5, lines 17-21;

data is preloaded into the cache according to the prefetch table], and servicing requests for boot

data from the host system using the preloaded boot data [col. 2, lines 41-47; col. 3, lines 30-39].

25.   As per claim 14, Krocker et al teach a cache memory device for storing the preloaded

boot data [fig. 1; cache].

26.   As per claim 15, Krocker et al teach that the logic code in the non-volatile memory

device further comprises program instructions executable by the DSP for maintaining a list of

application data associated with an application program [col. 11; lines 30-34; a prefetch table

containing disk storage location and length of the data records requested by the application

program]; preloading the application data upon launching the application program [col. 11, lines

46-50; preloading the data cache prior to receiving a read command from the application], and

servicing requests for the application data from the host system using the preloaded application

data col. 11, lines 51-57; communicating the prestored data records of the application from the

data cache to the host computer].

Claim Rejections - 35 USC § 103

27.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

28.   Claims 8, 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Krocker et al (US Patent no 6,073,232) in view of Dye (US Patent no 6,173,381 B1).

29.   As per claims 8, 11 and 16, Krocker et al disclose the invention substantially. Krocker et

al do not disclose about the data is being compressed and decompressed. But a routineer in the

art would know about the data compression as the data compression is well known for purpose of

space saving and increasing system bandwidth and efficiency. However Dye expressly disclose

this technique [col. 8, lines 6-14; col. 11, lines 62-66]. Therefore, it would have been obvious to

one of ordinary skill in the art at the time the invention was made to combine the cited references

as both are directed to improve a system with respect to bandwidth and efficiency.
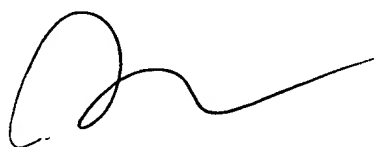
Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Suresh K Suryawanshi whose telephone number is 703-305-

3990. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thomas C. Lee can be reached on 703-305-9717. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sks

February 4, 2004

THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100